

AMENDMENTS TO THE CLAIMS

The following is a complete, marked-up listing of revised claims with a status identifier in parenthesis, underlined text indicating insertions, and strike through and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A computer readable medium including a lead-in area, a data area and a lead-out area, comprising:

physical mark information recorded as wobbled pits and straight pits in a specific area of the lead-in area not writeable by end user recorders,

wherein the physical mark information ~~wobbled pits~~ provides control information for controlling a reproduction of data recorded as straight pits on the data area and ~~are~~ is formed along a modulated unique pattern.

2-4. (Cancelled)

5. (Previously Presented) The computer readable medium according to claim 1, wherein the modulated unique pattern represents encryption information used in encrypting data of the data area.

6. (Previously Presented) The computer readable medium according to claim 5, wherein the control information further includes copy management information indicating whether duplication of the data is allowed.

7. (Currently Amended) The computer readable medium according to claim [[6]]5, wherein the physical mark information is recorded as at least one mark/space pair, wherein each mark/space pair includes a mark and a space each having an variable length.

8. (Currently Amended) The computer readable medium according to claim [[6]]5, further includes disc identification information identifying a type of the computer readable medium, wherein the disc information is located in an area preceding the lead-in area and the type of computer readable medium is one of read-only, recordable and rewritable.

9. (Cancelled)

10. (Previously Presented) The computer readable medium according to claim 8, wherein the physical mark information is recorded on a position of the recording medium detectable at an initial stage of a servo operation carried out in an optical disc apparatus, separately from a decoding operation to be carried out in the optical disc apparatus.

11. (Previously Presented) The computer readable medium according to claim 8, wherein the physical mark information is recorded in a permanent information and control data (PIC) area of the Blu-ray Disc Read-Only (BD-RO) disc where writing of data is impossible after manufacture of the computer readable medium.

12. (Cancelled)

13. (Currently Amended) An apparatus for ~~method of~~ forming a recording medium, comprising:

an optical pickup configured to form ~~forming~~ an information area for recording disc management information and/or data[[:]] and ~~forming~~ physical mark information as wobbled pits and straight pits in a specific area of a lead-in area of the recording medium, wherein the physical mark information ~~wobbled pits~~ provides control information for controlling a reproduction of data recorded as straight pits on a data area of the recording medium and ~~are~~ is formed along a modulated unique pattern, wherein the modulated unique pattern represents encryption information used in encrypting data of the data area.

14. (Cancelled)

15. (Currently Amended) The ~~method~~ apparatus of claim 13, wherein the optical pickup is further configured to record ~~further comprising: recording~~ disc identification information identifying a type of the recording medium in an area preceding the lead-in area, wherein the type of the recording medium is one of read-only, recordable and rewritable. .

16. (Cancelled)

17. (Currently Amended) The apparatus method of claim 15, wherein the optical pickup is configured to form ~~forming step forms~~ the physical mark information on a position of the recording medium being detectable at an initial stage of a servo operation carried out in an optical disc apparatus, separately from a decoding operation to be carried out in the optical disc apparatus.

18. (Currently Amended) The apparatus method of claim 15, wherein the optical pickup is configured to form ~~forming step forms~~ the physical mark information as wobbled pits and straight pits including at least one mark/space pair in a permanent information and control data (PIC) area of the Blu-ray Disc Read-Only (BD-RO) disc where writing of data is impossible after manufacture of the recording medium, the physical mark information is a Blu-ray Disc Read-Only Memory (BD-ROM) identification area (ROMID), and the recording medium is a read-only recording medium.

19. (Currently Amended) The apparatus method of claim 15, wherein the optical pickup is configured to further record ~~further comprising: recording~~ copy management information indicating whether duplication of the data is allowed on the recording medium.

20. (Currently Amended) A method of reproducing data from a recording medium, including a lead-in area, a data area and a lead out-area comprising:

detecting physical mark information recorded as wobbled pits and straight pits in a specific area of the lead-in area not writable by end user recorders, the physical mark information ~~wobbled pits~~ being formed along a modulated unique pattern; and

controlling a reproduction of ~~recorded data~~ recorded as straight pits from the data area based on the detected physical mark information.

21. (Cancelled)

22. (Previously Presented) The method of claim 20, further comprising:
reading disc identification information identifying a type of the recording medium from an area preceding the lead-in area, wherein the type of the recording medium is one of read-only, recordable and rewritable.

23. (Currently Amended) The method of claim 22, wherein the detecting step detects the physical mark information recorded in a permanent information and control data (PIC) area of the Blu-ray Disc Read-Only (BD-RPO) disc where writing of data is impossible after manufacture of the recording medium.

24. (Previously Presented) The method of claim 23, wherein the controlling step controls the reproduction by utilizing the detected physical mark information formed along the modulated unique pattern which represents encryption information used in encrypting data of the data area.

25-40. (Cancelled)

41. (Previously Presented) The method of claim 24, wherein the controlling step further controls a reproduction of a recording medium by utilizing copy management information recorded on the recording medium indicating whether duplication of data is allowed in such a manner that the reproduction is performed if the duplication is allowed.

42. (Currently Amended) An apparatus for reproducing data from a recording medium including a lead-in area, a data area and a lead-out area, comprising:

an optical pickup configured to detect physical mark information recorded as wobbled pits and straight pits in a specific area of the lead-in area not writable by end user recorders, the physical mark information ~~wobbled pits~~ being formed along a modulated unique pattern; and

a controller configured to control a reproduction of ~~recorded~~ data recorded as straight pits from the data area based on the detected physical mark information[[],].

43. (Previously Presented) The apparatus of claim 42, wherein the optical pickup is configured to read disc identification information identifying a type of the recording medium from an area preceding the lead-in area, wherein the type of the recording medium is one of read-only, recordable and rewritable.

44. (Currently Amended) The apparatus of claim 43, wherein the optical pickup is configured to detect the physical mark information recorded in a permanent information ~~[[&]]~~and control data (PIC) area of the Blu-ray Disc Read-Only (BD-RO) disc where writing of data is impossible after manufacture of the recording medium

45. (Previously Presented) The apparatus of claim 44, wherein the controller is configured to control the reproduction by utilizing the detected physical mark information formed along the modulated unique pattern which represents encryption information used in encrypting data of the data area.

46. (Previously Presented) The apparatus of claim 45, wherein the controller is configured to control the optical pickup to reproduce data based on copy management information recorded on the recording medium, the copy management information indicating whether duplication of data is allowed.

47. (New) The computer readable medium of claim 8, wherein the disc identification information is further included in a sub area of the lead-in area.

48. (New) The computer readable medium of claim 47, wherein the sub area of the lead-in area is permanent information and control data (PIC) area of the Blue-ray Disc Read-Only (BD-RO) disc where writing of data is impossible after manufacture of the computer readable medium.

END OF CLAIMS

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